DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF WASTE AND HAZARDOUS SUBSTANCES

Site Investigation & Restoration Section



Delaware Regulations Governing Hazardous Substance Cleanup

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Department of Natural Resources and Environmental Control Division of Waste and Hazardous Substances Site Investigation and Restoration Section

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1.0 General Provisions

- 1.1 Statement of Authority and Purpose
 - 1.1.1 The Regulations Governing Hazardous Substance Cleanup (Regulations) are promulgated in accordance with 7 **Del.C.** Ch. 91, Delaware Hazardous Substance Cleanup Act (Act), 7 **Del.C.** Ch. 60, Environmental Control, and 7 **Del.C.** Ch. 63, Hazardous Waste Management. The goal of these Regulations is to implement the purposes declared in 7 **Del.C.** §9102.
 - 1.1.2 The Delaware Department of Natural Resources and Environmental Control (Department) is responsible for protecting, preserving and enhancing the environmental quality of the water, air, and land of the State. The Hazardous Substance Cleanup Act authorizes the Secretary of the Department to promulgate regulations implementing the provisions of the Act.
 - 1.1.3 These Regulations provide a process to accomplish cleanups in order to protect public health or welfare or the environment, and to provide opportunities to encourage remedial activities at facilities to yield economic revitalization and redevelopment within the State.
 - 1.1.4 The cleanup levels achieved through action pursuant to these Regulations shall be equivalent irrespective of the program under the Act pursuant to which the cleanup is conducted.
 - 1.1.5 No person shall obstruct, hinder, delay or interfere with Department personnel in carrying out their duties under the Act.

1.2 Applicability

- 1.2.1 The requirements of these Regulations shall apply to any facility with a release or imminent threat of release and any person who conducts an investigation or remedial action at a facility with a release or imminent threat of release.
- 1.2.2 Pursuant to 7 **Del.C.** §9104(a), the requirements of these Regulations shall not apply to the following:
 - 1.2.2.1 Releases excluded by 7 **Del.C.** §9103 (21) a-d; or
 - 1.2.2.2 Facilities where the sole contaminants are lead and/or asbestos originating from either lead-based paint or asbestos-containing material applied to or contained within a structure on the facility and where the Department determines the facility is appropriately regulated and adequately addressed by another state or federal agency, statute or regulation.
- 1.2.3 The Department has the discretion to apply these Regulations to a release that is subject to regulation under 7 **Del.C.** Ch. 74 or 7 **Del.C.** Ch. 74A under the following circumstances:
 - 1.2.3.1 There is a change in land use from restricted to unrestricted; or
 - 1.2.3.2 At the request of the owner or operator or brownfield developer; and
 - 1.2.3.2.1 There is a release of a hazardous substance that is subject to regulation under these Regulations; or

- 1.2.3.2.2 The Department determines that the application of these Regulations furthers the purposes of the Act.
- .2.4 Where the land use of a golf course or commercial orchard is being changed to a non-agricultural use, the Department will require the owner or operator to establish that fertilizers and/or pesticides were appropriately applied upon the property during such ownership or operation. In order to establish the appropriate application, DNREC may require that the owner or operator provide various documentation including, but not limited to, the following:
 - 1.2.4.1 Identification of the manufacturer of each pesticide and/or fertilizer applied to the property during the period of ownership or operation;
 - 1.2.4.2 The factual circumstances relating to the application of fertilizers and/or pesticides on the property including: all documentation pertaining to the dates such substances were applied, as well as all labeling, instructions, warnings, sales materials, invoices, logs or other written information or data relating to the application of each fertilizer and/or pesticide;
 - 1.2.4.3 The failure to provide documentation as required in Section 1.2.4 shall create a presumption that any such fertilizers and/or pesticides were not appropriately applied.
- 1.3 Applicability of other Laws and Regulations
 - 1.3.1 Nothing in these Regulations shall be construed to limit the authority of the Department to act pursuant to other existing laws and regulations.
 - 1.3.2 Any action taken under the authority of these Regulations shall be in compliance with all applicable federal, state and local laws and regulations.

1.4 Severability

1.4.1 If any provision of these Regulations is adjudged to be unconstitutional or invalid by a court of competent jurisdiction, the remainder of these Regulations shall not be affected thereby.

1.5 Oversight

- 1.5.1 Concurrent Oversight
 - 1.5.1.1 A person may obtain the Department's concurrent oversight of work on any aspect of a remedy by entering into a settlement agreement with the Department for that purpose.
 - 1.5.1.2 By obtaining the Department's concurrent oversight of work, a person will be able to receive the Department's approval that the work which is proposed for a facility satisfies the requirements of the Act, these Regulations, and all applicable policies, procedures, and guidance.
 - 1.5.1.3 The interim action, remedial action, and operation and maintenance portions of a remedy shall not be performed by any person without the concurrent oversight of the Department except as provided under Section 12.0.

1.5.2 Subsequent Oversight

- 1.5.2.1 A person may perform an initial investigation, facility evaluation, remedial investigation, or feasibility study without the concurrent oversight of the Department.
- 1.5.2.2 A person may obtain subsequent oversight of work not performed with the Department's concurrent oversight by entering into a settlement agreement with the Department for it to review such prior work and determine whether it can be approved as satisfying the requirements of the Act, these Regulations, and any applicable policies, procedures, and guidance.
- 1.5.2.3 If the Department determines that any portion of the work does not satisfy the requirements of the Act, these Regulations, and any applicable policies, procedures, and guidance, it may require that additional remedial work be performed prior to approving the person's work or it may disapprove the work entirely.

1.5.3 Emergency Oversight

1.5.3.1 A person may undertake an emergency response action at a facility after initiation of a remedy pursuant to these Regulations without the Department's oversight provided the person notifies the Department of the details of the action taken, within 48 hours of the initiation of the emergency response action. This does not limit or relieve a person's liability under other existing federal or state laws or regulations for undertaking an emergency response action at a facility.

2.0 Definitions and Usage

- 2.1 Definitions The following words, terms and phrases, when used in this regulation, shall have the following meaning unless the context clearly indicates otherwise.
- "Acceptable risk" means a probability of one additional lifetime incidence of cancer in 100,000 (1x10-5) or less for carcinogens, and a hazard index of one (1) or less for non-carcinogens, as applicable. For certain contaminants, including lead, where cancer or non-cancer risk does not apply, the Department may approve or require other methods that it determines are appropriate for determining risk.
- "Act" means 7 Del.C. Ch. 91, the Delaware Hazardous Substance Cleanup Act.
- "All Appropriate Inquiry (AAI)" means the requirements for assessing the environmental conditions of a property prior to its acquisition. Detailed requirements for AAI are presented in the EPA's All Appropriate Inquiries Final Rule (40 CFR Part 312) (Nov. 1, 2005), as amended, or ASTM International's Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-05), as amended.
- "Allowable Interest Rate" means a rate of interest 5% over the Federal Reserve discount rate.
- "Aquifer" means a geologic formation, group of formations, or a part of a formation capable of yielding groundwater to wells or springs.
- "Background level" means the concentration of substances widely present in the soil, sediment, air, surface water or groundwater in the vicinity of a facility, or at a comparable

- reference area, due to natural causes or human activities other than releases from, or activities on, the facility, as determined by the Department.
- "Baseline conditions" or "Baseline" means the condition or conditions that would have existed at the natural resource damage assessment area had the release of hazardous substances under investigation not occurred.
- "Brownfield Developer" means any person as defined in 7 Del.C. §§9123 (1).
- "Brownfields Development Agreement" means an agreement between the Secretary and a Brownfields Developer with respect to a certified brownfield that sets forth a scope and schedule of activities to assess and respond to the actual, threatened, or perceived release of hazardous substances at the facility.
- "Brownfields Development Program" means the remedial process established by the Department under 7 Del.C. Ch. 91, Subchapter II.
- "Brownfields Investigation" means an evaluation under the Brownfields Development Program which includes the assessment of an actual, threatened, or perceived release of a hazardous substance at a facility to determine the nature, extent, and impact of the actual, threatened, or perceived release, and the evaluation of the feasibility of the proposed development plan to serve as all or a portion of the remedial action.
- "Carcinogen" means a hazardous substance which causes or induces cancer in humans. The term also includes suspected carcinogen which may cause or induce cancer in humans.
- "CERCLA" means the Comprehensive Environmental, Response, Compensation and Liability Act of 1980, 42 U.S.C. Sec. 9601Chapter 103 et seq., as amended.
- "Cleanup level" means the concentration of hazardous substances in the environment that meet the acceptable risk for the land use intended by the owner or developer, or the background level established by the Department.
- "Conditional No Further Action" means that based on the information available following an initial investigation or facility evaluation, the Department determines that: (a) there has been no release or there is no imminent threat of release; (b) a release has occurred which does not pose a threat to public health or welfare or the environment above the acceptable site specific risk; or (c) action by another authority is appropriate.
- "Consultant" means a contractor who is hired to provide professional services for remedies with regard to a facility.
- "Contaminant of concern" means a hazardous substance identified during a remedy where the concentration exceeds the cleanup level.
- "Contaminant of Potential Concern" means a hazardous substance identified during a remedy where the concentration exceeds the Department's screening levels.
- "Data Quality Objectives" means qualitative and quantitative statements of the overall level of uncertainty that the Department will accept in results or decisions based on environmental data.
- **"Day"** means a calendar day; however, when used to determine when a document is due, or an action is required, and the day falls on the weekend or a holiday, the document may be submitted, or the action started, on the first working day after the weekend or holiday.

- "Department" means the Delaware Department of Natural Resources and Environmental Control.
- "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any hazardous substance into or on any land, water or into the air so that such hazardous substance or any constituent thereof may enter the environment.
- "Emergency response" means a remedy undertaken to eliminate or control an immediate threat to public health or welfare or the environment.
- **"Environment"** means the navigable waters, the waters of the contiguous zone, ocean waters, and any other surface water, groundwater, drinking water supply, land surface or subsurface strata or air within the State.
- "EPA" means the United States Environmental Protection Agency.
- "Facility" means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, aircraft or any site or area where a hazardous substance has been generated, manufactured, refined, transported, stored, treated, handled, recycled, disposed of, released, placed or otherwise come to be located. Where there is or has been a release or threat of release on real property, a portion of the real property may be considered a facility for the purpose of performing a remedy. A facility also includes all properties where hazardous substances may have migrated to or come to be located since being released.
- "Facility Closure Determination" means that the Department has determined that the facility meets all of the requirements of the Act, and that all requirements of the Final Plan of Remedial Action have been met and no restrictions remain on the facility.
- "Facility Evaluation" means an investigation to identify a release of a hazardous substance and generate data to perform an initial screening and make a decision regarding future action at the facility.
- "Feasibility Study" means an evaluation to identify the potential remedial alternatives that are applicable to satisfy the remedial action objectives for the facility.
- "Final Plan of Remedial Action" means the Department's written determination of the appropriate remedial action under the Act at a facility for the current or anticipated land use to protect public health, welfare and the environment.
- "Free product" means a hazardous substance which occurs as a non-aqueous phase liquid in surface water, groundwater, the vadose zone, or the ground surface. This term encompasses free, mobile, or residual product.
- "Groundwater" means water below the land surface in the zone of saturation.
- "Hazard ranking" means the process of assigning relative rank or priority to a facility using the Delaware Hazard Ranking Model. In ranking facilities, the Department may group them in categories of relative risk.
- "Hazardous substance" means: (a) any hazardous waste as defined in 7 Del.C. Ch. 63 or any hazardous waste designated by regulation promulgated pursuant to 7 Del.C. Ch. 63; (b) any hazardous substance as defined in CERCLA or regulations promulgated pursuant

thereto; (c) any substance determined by the Secretary through regulation to present a risk to the public health or welfare or the environment if released into the environment; (d) <u>any substance listed in the Department's Screening Level table; (e)</u> any polychlorinated biphenyl; or (fe) petroleum, including crude oil or any fraction thereof; however any release of hazardous substances from a storage tank which is regulated by 7 **Del.C.** Ch. 74 or 7 **Del.C.** Ch. 74A or regulations promulgated pursuant thereto is not subject to these Regulations except as provided for in Section 1.2. Notwithstanding the Department's determination under Section 1.2 of these

Regulations, any release of petroleum, including crude oil or any fraction thereof, is eligible for funding under the Act.

- "Hourly rate of wages" means the total annual wages of a State employee divided by 1,650 hours or the monthly wages of an employee divided by the actual number of hours worked by the employee during the month.
- "Imminent threat of release" means potential for a release which requires action to prevent or mitigate damage to the environment or endangerment to public health or welfare or the environment which may result from such a release.
- "Indirect cost" means those costs incurred for a common of joint purpose benefitting more than one cost objective, and which are not readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved.
- "Indirect cost rate" means the ratio of indirect cost to the projected costs of salaries for facility remediation.
- "Initial investigation" means a process for identifying a suspected release or imminent threat of release. It includes review of existing information, facility visits, interviews with facility owner or operator and adjacent property owners, or other persons with knowledge of the facility.
- "Initial screening" means the comparison of the maximum observed concentrations of analytes found in environmental samples to background levels or and performance of a preliminary risk assessment based on the maximum observed concentrations found in each environmental sample from risk based values approved by the Department based on the results of the a facility evaluation or equivalent investigation to determine whether a release poses a threat to public health, welfare or the environment above acceptable site specific risk.
- "Injury" means a measurable adverse change, either long- or short-term, in the chemical, biological or physical quality or the viability of a natural resource, including loss thereof, resulting directly or indirectly from exposure to a release, or from attempts to remedy or mitigate a release.
- "Interim action" means the containment, cleanup, or removal of a release or imminent threat of release of hazardous substances from a facility, or the taking of other actions, prior to the selection of a remedial action, as may be necessary to prevent, minimize, or mitigate threats to public health or welfare or the environment.
- "Land Disturbing Activity" means activities that physically take place on the facility and include digging, drilling, excavating, grading, clearing, earth moving, filling, or performing any subsurface work, but excludes all environmental investigation, planning, designing, or engineering work related to the facility, as well as any physical activity performed off the

- facility in preparation for, or related to, construction and development activities that will occur on the facility.
- "Long-term effectiveness" means the ability of an implemented remedial action to maintain the desired level of protection over an extended period of time.
- "Long-term Stewardship" means the long-term management of contaminated environmental media at sites that is necessary to protect human health and the environment. Long-term stewardship generally includes the establishment and maintenance of physical and legal controls, implementation entities, authorities, accountability mechanisms, information and data management systems, and/or resources that are necessary to ensure that these sites remain protective of public health or welfare or the environment.
- "Maximum Contaminant Level" or "MCL" means the level of a specific chemical promulgated by EPA pursuant to the Safe Drinking Water Act, 42 U.S.C. Sec 300(f), et seq., as amended.
- "Natural Resources" means land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the State of Delaware, the federal government, other states, any foreign government, any local government, or any Indian tribe.
- "Natural Resource Damages" or "Damages" means the compensation sought by the Department as a result of injury, destruction, or loss of natural resources or services, or the restoration or replacement of such natural resources or services.
- "Natural Resource Damage Assessment" means the process of collecting, compiling, and analyzing information, statistics, or data to determine natural resource damages.
- "Natural Resource Services" or "Services" means the physical, chemical and biological function performed by the natural resource including the human use or aesthetic value of those functions.
- "Operation and Maintenance" or "O&M" means the activities required by the Department to provide for continued effectiveness and integrity of a Remedial Action.
- "Other employee cost rate" means the sum of State contributions to pension, unemployment insurance, Federal Income Contribution Act, health insurance, and worker's compensation for a State employee per year divided by 1,650 hours, or the sum of State contributions to pension, unemployment insurance, Federal Income Contribution Act, health insurance, and worker's compensation for a State employee per month divided by the actual number of hours worked by the employee during the month.
- "Oversight" means supervision by the Department of a person's work on any aspect of a remedy during the performance of that work, including the Department's review of any work done prior to the Department's supervision that now requires the Department's approval.
- "Owner or Operator" means: (a) any person owning or operating a facility; or (b) any person who previously owned, operated, or otherwise controlled activities at a facility; and (c) the term "owner or operator" does not include an agency of the State or unit of local government that acquired title or control of the facility involuntarily through bankruptcy, tax delinquency, abandonment or other circumstances; (d) the term "control" does not include regulation of the activity by a federal, state or local government agency; (e) the term "owner

- or operator" does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect his security interest in the facility; and (f) the term "owner or operator" does not include a person who, without acquiring legal title, conducts of directs activities in connection with the actual or potential acquisition or evaluation of a facility, including due diligence, site inspections, site assessments, all appropriate inquiry or other pre-closing activities in connection with the acquisition of a facility.
- "Pathway" means the route or medium through which hazardous substances are or were transported from the source of the release to the injured natural resources, the environment, and/or the exposed human population.
- "Person" means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, state government agency, unit of local government, school district, conservation district, federal government agency, Indian tribe or interstate body.
- "Phase I Environmental Site Assessment" or "Phase I" means an investigation performed in accordance with ASTM International's Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527), as amended.
- "Phase II Environmental Site Assessment" or "Phase II" means an investigation performed in accordance with ASTM International's Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (E 1903), as amended.
- "Potentially Responsible Party" or "PRP" means any person identified pursuant to 7 Del.C. §§9105 (a)(1) through (6) as a person liable with respect to a facility.
- "Proposed Plan of Remedial Action" means a written plan, issued by the Department for public comment, describing the appropriate remedial action under the Act at a facility for the current or anticipated land use to protect public health or welfare or the environment.
- "Priority list" means the list established by the Department using the Delaware Hazard Ranking Model to rate the relative risk of the facilities based on the risk they pose to the public health or welfare or the environment. In establishing a priority list, the Department may group facilities in categories of relative risk.
- "RCRA" means Resource Conservation and Recovery Act, 42 U.S.C. Sec. 6901, et seq., as amended.
- "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a hazardous substance, pollutant or contaminant into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes: (a) any release which results in exposure to a person solely within his or her workplace, with respect to a claim which such person may assert against his or her employer, provided, however, that this exclusion does not apply to any such release which also results in exposure to the environment; (b) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel or pipeline pumping station engine; (c) the appropriate application of fertilizers and pesticides as further defined in Section 1.2.4; and (d) any discharges in compliance with State permits issued in conformance with Title 7 of the Delaware Code and federally permitted releases under CERCLA.

- "Remedial Action" means the containment, contaminant mass or toxicity reduction, isolation, treatment, removal, cleanup, or monitoring of hazardous substances released into the environment, or the taking of such other actions, including natural resource damage restoration and replacement, as may be necessary to prevent, minimize, or mitigate harm or risk of harm to the public health or welfare or the environment which may result from a release or an imminent threat of a release of hazardous substances.
- "Remedial Investigation" means an evaluation of a release or imminent threat of release of a hazardous substance at a facility to determine the nature, extent, and impact of the release and the collection of data necessary to conduct a feasibility study of remedial alternatives.
- "Remedy" or "Remedial Activity" means any action, response or expenditure consistent with the purposes of the Act, or any regulations or guidance developed pursuant thereto to identify, minimize or eliminate any imminent threat posed by any hazardous substances to public health or welfare or the environment including preparation of any plans, conducting of any studies and any investigative, oversight of remedy or monitoring activities with respect to any release or imminent threat of release of a hazardous substance and any health assessments, risk assessments, health effect studies or natural resource damage assessments conducted in order to determine the risk or potential risk to public health or welfare or the environment.
- "Replacement" or "Acquisition of the equivalent" means the substitution for the injury or loss of a resource with another resource that provides the same or substantially similar services when such substitutions are in addition to any substitutions made or anticipated as part of remedial actions, and when such substitutions exceed the level of remedial actions determined appropriate to the facility pursuant to the Hazardous Substance Cleanup Act or the National Oil and Hazardous Substances Contingency Plan (NCP), as amended.
- "Reporting levels" means the concentrations of hazardous substances in the environment that are at or above the levels established by the Department, except for groundwater for which the reporting level shall be equivalent to the levels contained in the Delaware and federal drinking water standards.
- "Restoration" means actions undertaken to return an injured resource to its baseline condition, as measured in terms of the injured resource's physical, chemical or biological properties or the services it provided during its baseline conditions, when such actions are in addition to remedial actions completed or anticipated, and when such actions exceed the level of remedial actions determined appropriate to the facility pursuant to the Hazardous Substance Cleanup Act or the National Oil and Hazardous Substances Contingency Plan, as amended.
- "Risk assessment" means the analysis of the potential for adverse human health effects or adverse effects on ecological receptors caused by contamination.
- "Screening levels" means the concentrations of hazardous substances in the environment that are (a) the background levels established by the Department, or (b) in general ten times lower than the cleanup levels.
- "Secretary" means the Secretary of the Department or his or her designee.
- "Settlement Agreement" means a written agreement between one or more persons and the Department in which the terms and conditions are embodied in a consent decree,

administrative order on consent, memorandum of agreement, or any other type of agreement approved by the Department.

- **"Short-term effectiveness"** means the ability of the selected remedy to maintain the desired level of protection during the implementation phase of the remedy.
- "SIRS" means the Department's Site Investigation and Restoration Section.
- "Site Assessment" means the assessment of a facility or property to determine whether hazardous substances have entered the environment.
- "Site" means facility.
- "Site Specific Risk" means the risk of a potential adverse effect to public health or welfare or the environment resulting from exposure to a release of hazardous substances at the site based on its current and potential future use.
- "Surface water" means the waters of the State of Delaware occurring on the surface of the earth.
- "Trustee" or "Natural Resource Trustee" means any Federal natural resources management agency designated in the National Oil and Hazardous Substances Contingency Plan, as amended, and any State agency designated by the Governor of each state, pursuant to section 107(f)(2)(B) of CERCLA and applicable State statute that may prosecute claims for damages under the Act, Clean Water Act, or section 107(f) or 111(b) of CERCLA, or an Indian tribe, that may commence an action under the Act of section 126(d) of CERCLA.
- **"Voluntary Cleanup Program"** or **"VCP"** means the remedial process established by the Department under 7 **Del.C.** Ch. 91, into which a party voluntarily enters into, provided the application is approved by the Department, for the purpose of conducting a remedy at a facility.
- "VCP Agreement" means a legal and administrative document entered into between the Department and the VCP applicant that provides for the performance of a remedy at a facility, and the reimbursement of the Department's oversight costs, by the applicant.
- 2.2 Usage For the purpose of these Regulations, the following usages shall apply:
 - 2.2.1 Unless the context clearly requires otherwise, the use of the singular shall include the plural and conversely;
 - 2.2.2 "Include" or "including" means including, but not limited to;
 - 2.2.3 "May" means the provision is optional, at the discretion of the Department; and
 - 2.2.4 "Shall" and "will" mean the provision is mandatory.

3.0 Facility Identification & Prioritization

- 3.1 Notification Requirements
 - 3.1.1 An owner of operator of a facility who has knowledge of a release of a hazardous substance at concentrations at or above the reporting levels must notify the SIRS in writing of the release prior to undertaking land disturbing activities in any area potentially affected by the release.

- 3.1.2 If during land disturbing activities there is evidence of a release that was not previously reported pursuant to Subsection 3.1.1, the owner or operator of a facility must, within twenty-four (24) hours of learning of a potential release, notify the Department's 24 Hour Release Hotline by calling 800-662-8802.
 - 3.1.2.1 Evidence of a release includes: appearance of a sheen, soil staining, or odors characteristic of hazardous substances; buried materials that may contain hazardous substances; or presence of free product.
 - 3.1.2.2 For notification made under Subsection 3.1.2 that is referred to SIRS, SIRS will respond to the notice on a priority basis to determine if land disturbing activities can continue in the area potentially affected by the release without entering into a settlement agreement.
- 3.1.3 If a Brownfield Developer, prospective purchaser, or a person acting on behalf of the Brownfield Developer, the prospective purchaser, or the owner or operator reports a release to the SIRS in compliance with Subsections 3.1.1 and 3.1.2, this notification requirement will be satisfied.
- 3.1.4 If the Department becomes aware of a release or evidence of a release that requires notification under this section, the Department will notify the owner or operator of the facility.
- 3.1.5 If notification is required or made under Section 3.1, the owner or operator shall not proceed or continue with land disturbing activities in any area potentially affected by the release without the written approval of the Department, which will not be unreasonably delayed or withheld. The Department may require a remedy before land disturbing activities can proceed or continue.
- 3.2 The Department shall establish an inventory of hazardous substance release facilities.
 - 3.2.1 Facilities with a release or imminent threat of release of hazardous substances may be identified by the Department through a variety of mechanisms including any of the following:
 - 3.2.1.1 Reports to or from, or investigations by, the Department, including the Site Investigation and Restoration Section, Tank Management Section, Solid and Hazardous Waste Management Section, Emergency Prevention and Response Section, or Division of Water; or from information provided in a Brownfield Certification application by a developer, a prospective purchaser, or a facility owner.
 - 3.2.1.2 Reports tow or from, or investigations by, local, state and federal government agencies including the Delaware Department of Health and Social Services, Delaware Department of Transportation, Delaware Emergency Management Agency, State Police or other law enforcement agencies, State Fire Marshal's Office or any Fire Department, United States Environmental Protection Agency, Department of Defense or other Federal agencies.
 - 3.2.1.3 Reports to the Department from real estate transaction-related environmental assessments as part of all appropriate inquiry (AAI) requirements.

- 3.2.1.4 Other reporting sources including potentially responsible parties, impacted public, neighboring facilities, contractors, consultants and other persons with sources of information about the existing releases.
- 3.2.2 A facility may be removed from the inventory of hazardous substance release facilities list and the priority list of facilities after the Department has determined that no further action is required at the facility.

3.3 Priority List

3.3.1 Applicability

3.3.1.2 The Department shall establish a priority list of facilities from the inventory of hazardous substance release facilities where a further remedy has been determined to be necessary, based on the relative hazard ranking of the facility into categories using the Delaware Hazard Ranking Model. The relative priorities established in the priority list may be considered in the preparation of funding recommendations, and in determining the priority for remedies among facilities. The Department may conduct or require a remedy at a facility even if it is not included on the list.

3.3.2 Criteria for Placement of Facilities on Priority List

- 3.3.2.1 Facilities may be placed on the priority list if, after the completion of an initial investigation, the Department has determined that further remedy is required at the facility. Placement of a facility on the priority list does not, by itself, constitute a determination that persons associated with the facility are liable under the Act of these Regulations.
- 3.3.2.2 Facilities placed on the priority list will be given a hazard ranking. The purpose of the hazard ranking is to estimate the relative potential risk posed by the facility to public health or welfare or the environment based on the information compiled during the initial investigation and subsequent investigations.
- 3.3.2.3 The Department will objectively assess the relative degree of risk of each facility which is to be placed on the priority list using the Delaware Hazard Ranking Model established by the Department. Information obtained in the initial investigation, and any subsequent investigations and any additional data specified by the Department, will be included in the hazard ranking evaluation.
- 3.3.2.4 The Department will, upon request, make available to the facility owner and operator and any potentially responsible party known to the Department, the final hazard ranking results for a facility to be placed on the priority list.

3.4 Brownfields Certification and Funding

3.4.1 In order to qualify for the Brownfields Development Program, the property must be certified as a Brownfield. To receive a Brownfields Certification, the Brownfield applicant shall submit a Brownfields Certification Application to the Department seeking Brownfield Certification for the property. The property

- certification request can be initiated by a Brownfields Developer, the current property owner, the Department, or any public agency.
- 3.4.2 Application for Brownfield Certification
 - 3.4.2.1 Brownfield Certification shall be provided only to those persons who apply for a certification from the Department. Such application shall contain, at a minimum, the following information:
 - 3.4.2.1.1 Name and address of the person seeking the certification, and their relationship to the property;
 - 3.4.2.1.2 Address of the property including tax parcel designation;
 - 3.4.2.1.3 Current use of the property and its zoning classification;
 - 3.4.2.1.4 The proposed development or redevelopment plan;
 - 3.4.2.1.5 Reason to believe that the property may be contaminated and why such contamination may hinder development or redevelopment.
 - 3.4.2.2 Upon request by the Department, the applicant shall provide:
 - 3.4.2.2.1 Documentation regarding environmental investigations of the property, or chronic violator status of the applicant pursuant to 7 **Del.C.** §7904.
 - 3.4.2.2.2 The factual basis for concluding that the property is abandoned, vacant or underutilized;
 - 3.4.2.2.3 The factual basis for concluding that the facility is contaminated;
 - 3.4.2.2.4 Certification that the Brownfield Developer will comply with all applicable procedural requirements.
 - 3.4.2.3 All items contained in the application shall be addressed by either providing the required information or stating that the item is not applicable. In the event that an item is considered not applicable, the Brownfield Developer must include a written justification in the application that demonstrates to the satisfaction of the Department that the item is not applicable to the application.
 - 3.4.2.4 After a Brownfield Certification Application is submitted to the Department, the Department shall review the application to determine whether the application is complete. After its review, the Department shall issue a letter to the applicant advising either (1) that the property is certified and/ or the developer is approved, (2) that the application is incomplete and identifying the specific information that must be submitted or supplemented to make the application complete, or (3) that the certification is denied.
 - 3.4.2.5 The applicant shall promptly update and/or correct information previously submitted as part of the application whenever the applicant discovers that this information is incomplete or inaccurate.
- 3.4.3 Criteria for Brownfields Property Certification

- 3.4.3.1 The Department may certify all or part of a parcel of real property as a Brownfield if the property meets the following criteria:
 - 3.4.3.1.1 All or part of the property is abandoned, vacant, or underutilized; and
 - 3.4.3.1.2 All or part of the property is subject to either a current or prospective development or redevelopment plan; and
 - 3.4.3.1.3 All or part of the property meets any one (1) of the following conditions:
 - 3.4.3.1.3.1 The development or redevelopment of the property may be hindered by the reasonably held belief that it may be environmentally contaminated; or
 - 3.4.3.1.3.2 The property is or has been used in whole or part as:
 - 3.4.3.1.3.2.1 A salvage yard;
 - 3.4.3.1.3.2.2 A regulated Tank facility pursuant to 7 **Del.C.** Ch. 74 or 7 **Del.C.** Ch. 74A;
 - 3.4.3.1.3.2.3 A drycleaner where any dry cleaning is performed onsite;
 - 3.4.3.1.3.2.4 A RCRA (Subtitle C) treatment, storage, or disposal facility for which the US EPA or the State RCRA program has expressed in writing no further interest in remediating under these programs;
 - 3.4.3.1.3.2.5 A permitted or non-permitted landfill or dump;
 - 3.4.3.1.3.2.6 The land contains potentially contaminated material;
 - 3.4.3.1.3.2.7 A known hazardous substance release site that has not been remediated to the standard applicable to the intended land use, including those facilities previously identified by the Department; or
 - 3.4.3.1.3.2.8 A National Priority Priorities List (NPL) or Federal CERCLIS site that has a "No Further Interest" designation from the US EPA.
- 3.4.3.2 Sites which are subject to an enforcement action from any State or Federal environmental agency, and for which an administrative or judicial order is in effect or is proposed, may not be eligible for Brownfield Certification, unless the enforcement action is resolved to the satisfaction of the Secretary.
- 3.4.3.3 A Brownfields Developer shall be required, at a minimum, to perform a FE of the facility, as approved by DNREC, within 24 months of entering into a BDA.
- 3.4.3.4 Any Brownfield Certification decision is at the sole discretion of the Secretary.
- 3.4.3.5 An inventory of Certified Brownfield sites will be made publicly available.
- 3.4.4 Criteria for Brownfields Developer Eligibility

- 3.4.4.1 In order for a person to obtain the rights and protections and assume the obligations of the status of Brownfields Developer, the person must submit an application to the Department for approval of Brownfields Developer status. At the time of application for the Brownfields Development Agreement, an applicant cannot be a potentially responsible party at the facility pursuant to 7 **Del.C.** §9105(a)(1)-(6), and is not affiliated with any other person that is liable for a release or imminent threat of release at the facility pursuant to 7 **Del.C.** §9105(c)(4)5.
- 3.4.4.2 The Secretary has the discretion to deny Brownfields Developer status to an applicant if the applicant, including any employees or agents thereof, or any entity affiliated with or controlled by the applicant, has been determined to have violated any federal, state, or local environmental law.
- 3.4.4.3 Prior to approval, the application must be complete and must contain all of the information required by the Department, including the information required by Section 3.4.2 of these Regulations.
- 3.4.5 Funding under Brownfield Certification
 - 3.4.5.1 Upon the filing of a Brownfield Certification Application (BCA), the applicant may also choose to request financial assistance. Completion of the financial section of the BCA does not guarantee a commitment for funding, nor does it obligate the State of Delaware or any State agency to provide any form of financial assistance.
 - 3.4.5.2 Submission of a funding request is optional and the decision to approve funding is at the discretion of the Department.

3.5 Facility Tracking

3.5.1 The Department may maintain a database recording the actions taken at facilities that have been identified with a release, an imminent threat of release, or an identified potential release of hazardous substances.

3.6 Record Keeping

- 3.6.1 The Department shall require the following record keeping procedures:
 - 3.6.1.1 Any remedial activities at a facility must be documented by the person performing the action. Such records include factual information or data, relevant decision documents, and any other relevant, facility-specific documents or information. The formats of the documents may include, paper, audio, video, photographs, and electronic files.
 - 3.6.1.2 Records shall be retained for at least ten (10) years from the date of completion of remedial action, site closure, or Conditional No Further Action letter.
 - 3.6.1.3 Records shall be retained by the person taking remedial action, unless the Department requires that they be submitted.
 - 3.6.1.4 The Department shall become the repository of any remedial records if the person files for bankruptcy.

3.6.1.5 The Department shall maintain its records in accordance with these Regulations.

4.0 Potentially Responsible Parties

4.1 Identification

- 4.1.1 The Department may initiate identification of potentially responsible parties associated with the facility, as soon as practicable.
- 4.1.2 The Department may use existing information-gathering authorities and coordinate such investigation with other state, local, and federal agencies.

4.2 Potentially Responsible Party Notification

- 4.2.1 The Department may issue a notice letter to any person or entity it believes to be a potentially responsible party with respect to a facility as provided for in 7 **Del.C.** §9105. The notice letter shall be sent to the last known address of the potentially responsible party. A copy of the notice letter may be provided to the local unit of government in which the facility is located. The notice letter shall provide the following:
 - 4.2.1.1 The name of the person or entity the Department believes to be potentially liable;
 - 4.2.1.2 A general description of the location of the facility;
 - 4.2.1.3 The basis for the Department's position that the person has a relationship to the facility;
 - 4.2.1.4 The basis for the Department's position that a release or imminent threat of a release of a hazardous substance may pose a threat to public health or welfare or the environment; and
 - 4.2.1.5 The names of other persons or entities to which the Department has sent such a notice letter with respect to the facility.
- 4.2.2 The Department reserves the right to notify additional potentially responsible parties at any time, and to facilitate efforts by potentially responsible parties to identify additional potentially responsible parties.

4.3 Notice of Potential Liability

- 4.3.1 In the event that a potentially responsible party for a facility cannot be located, the Department may publish in accordance with Section 8.0 of these Regulations, a public notice regarding a potentially responsible party which shall provide the following:
 - 4.3.1.1 The names and last known addresses of a person that the Department believes to be a potentially responsible party for the facility;
 - 4.3.1.2 The address or a general description of the location of the facility;
 - 4.3.1.3 The basis for the Department's position that a release or imminent threat of a release of a hazardous substance at the facility may pose a threat to public health or welfare or the environment;

- 4.3.1.4 The basis for the Department's position that the person or entity is a potentially responsible party under 7 **Del.C.** §9105 for the facility; and
- 4.3.1.5 The name and contact information of the person within the Department who the potentially responsible party can contact in order to obtain further information about the facility, and to enter into negotiations for a settlement agreement to address the release or imminent threat of release of hazardous substances at the facility.

4.4 Information Request

4.4.1 If the Department determines that there is a reasonable basis to believe that there has been a release or an imminent threat of a release of a hazardous substance, the Secretary may require information or documentation relevant to the release from any person who may have pertinent information as described in 7 **Del.C.** §9106.

5.0 Settlement Agreements & Brownfields Development Agreements

- 5.1 Settlement agreements and Brownfields Development Agreements shall include the following:
 - 5.1.1 The name and address of the potentially responsible party, the prospective purchaser, or the Brownfield Developer, and any other affiliated corporation, entity, or other person that will perform or pay for remedial activity at the facility;
 - 5.1.2 The address and tax parcel number of the facility in question;
 - 5.1.3 The name of the current owner of record and/or operator of the facility; and
 - 5.1.4 For agreements which require the performance of a remedy at a facility, the Department may include a description of:
 - 5.1.4.1 The areas of the facility where the remedy is to be conducted;
 - 5.1.4.2 The type of remedy to be performed; and
 - 5.1.4.3 Any financial or oversight resources to be provided by the Department.

5.2 Cost Recovery

- 5.2.1 The Department may seek to recover costs from the potentially responsible parties or any person requiring oversight or review.
 - 5.2.1.1 Recoverable costs from a potentially responsible party include all remedial costs incurred by the Department, natural resource damages, oversight, indirect and administrative costs, and costs associated with long-term stewardship activities.
 - 5.2.1.2 Recoverable costs from a Brownfield developer include remedial costs incurred by the Department beginning upon its receipt of the application for certification of the site into the brownfield program, including oversight, indirect and administrative costs, and costs associated with long-term stewardship activities as specified in the brownfields development agreement, but excluding natural resource damage assessment and restoration costs not caused by the Brownfield developer and costs incurred by the Department

- prior to the Brownfield developer's submission of its application for admission into the brownfield program.
- 5.2.2 Remedial costs with regard to a specific facility are calculated to reflect the actual costs incurred by the Department. Such costs are calculated for each facility as set forth below.
 - 5.2.2.1 The total number of direct hours expended by each employee of the Department with regard to a specific facility is multiplied by the employee's hourly rate of wages and then the figures derived for each employee are added together.
 - 5.2.2.2 The figure derived from Subsection 5.2.2.1 is added to a figure derived by multiplying the total figure from Subsection 5.2.2.1 by the current indirect cost rate.
 - 5.2.2.3 The figure derived from Subsection 5.2.2.2 is added to a figure derived by multiplying the number of hours worked by each employee of the Department with regard to the specific facility by the other employee costs rate for the employee.
 - 5.2.2.4 All payments made by the Department to its contractors, consultants or vendors for the procurement of services, supplies or equipment for the specific facility are added to the figure derived from Subsection 5.2.2.3.
- 5.2.3 Recoverable costs include interest at the allowable interest rate upon all costs of the Department associated with a release or threat of release from the time they were incurred until the time they are paid.

6.0 Consultant Certification

- 6.1 Consultant certification is required for any person performing, supervising, or designing the following remedies under the Act.
 - 6.1.1 Investigative and remedial action work including facility evaluations, site inspections, remedial investigations, Brownfields investigations, human health risk assessment, feasibility studies, oversight, and long-term stewardship.
 - 6.1.2 Ecological work including ecological risk assessments, and natural resource damage assessments, restorations, and enhancements.
- 6.2 Consultant certification is not required for persons performing visual inspections or other non-technical long_term stewardship activities as approved by the Department.
- 6.3 The Department may disapprove any remedy not performed by a certified consultant under the Act.
- 6.4 Any certified consultant shall notify the Department in writing of any change of name or address of the business, or any change of personnel who were identified in the application for certification or recertification, within sixty (60) days of such change.
- 6.5 A certified consultant shall notify the Department, in writing, within ten (10) days of the date it becomes aware that it or any of its officers, project managers, supervisors, or personnel identified in the application for consultant certification or recertification, working on any matters within this State, have been:

- 6.5.1 Convicted of a felony or any crime relating to any environmental activities, or for fraudulent conduct of any kind; or
- 6.5.2 Found liable in any civil litigation or administrative enforcement action relating to environmental activities.

6.6 Qualification Requirements for Certification

- 6.6.1 A consultant may apply for certification to be able to perform investigative and remedial action work, ecological work or any combination of these.
- 6.6.2 All consultants seeking certification shall submit a complete application with appropriate documentation to the satisfaction of the Department, and provide proof of a valid Delaware business license.

6.7 Requirements for Certification for first time applicant

- 6.7.1 Applications shall be submitted on forms supplied by the Department.
- 6.7.2 All consultants seeking certification shall submit a complete application with appropriate documentation to the satisfaction of the Department, and provide proof of a valid Delaware business license.
- 6.7.3 Applications shall contain the appropriate documentation of experience and training as part of the submittal of a qualified consultant seeking certification to perform remedies.
 - 6.7.3.1 To be certified for investigative or remedial action work, an applicant must employ, or contract with, both a Delaware professional engineer (PE) and a Delaware professional geologist (PG).
 - 6.7.3.2 To be certified for ecological work, an applicant must employ, or contract with persons who have demonstrated, to the satisfaction of the Department, competence in biology, wetland delineation and restoration, ecology, ecotoxicology, and environmental economics.
- 6.7.4 The Department shall notify the applicant in writing of the issuance or denial of the certification, or the need for further information in order to process the application.
- 6.7.5 Any applicant denied certification may request a public hearing in writing to the Department within twenty (20) days of receipt of denial of certification pursuant to the provisions in Section 6.10.
- 6.7.6 Certification shall be valid for a period of two (2) years from the date of issuance, unless suspended or revoked in accordance with these Regulations.
- 6.7.7 The application fee for certification or recertification is \$500.

6.8 Standards of Performance for Certified Consultants

- 6.8.1 All certified consultants are required to meet the following standards of performance:
 - 6.8.1.1 A minimum of one (1) qualified individual, representing the certified consultant, shall be present during the performance of any remedial activities on a site.

- 6.8.1.2 A certified consultant shall perform remedial activities according to accepted practices and procedures.
- 6.8.1.3 All required notifications and applications shall be submitted to the Department as specified in the Regulations.
- 6.8.1.4 Any request to deviate from these Standards of Performance shall be submitted in writing to, and approved by, the Department prior to implementation.

6.9 Requirements for Recertification

- 6.9.1 At least thirty (30) days prior to expiration of the certification, the certified consultant shall submit a letter to the Department requesting recertification and verifying that the application on file is still accurate, or submit a new application with updated information. The cost of recertification is due at the same time as the request letter.
- 6.9.2 The Department shall notify the certified consultant in writing of the approval or denial of the request, or the need for further information in order to process the recertification request. The reasons for a denial of certification shall be explained by the Department, in writing, at the time of denial. The Department, at its discretion, may allow an extension of the original certification until all the requirements for recertification are satisfied.
- 6.9.3 Any certified consultant denied recertification may request a public hearing, in writing, within twenty (20) days of receipt of denial.
- 6.9.4 Recertification shall be valid for a period of two (2) years from the date of issuance, unless suspended or revoked in accordance with these Regulations.
- 6.9.5 In the event the certified consultant fails to apply for recertification before the expiration date, the certification will expire at the end of the original two year period. Any certified consultant whose certification has expired shall be required to reapply for certification. If the certification has lapsed for two years or more, the applicant shall apply as a first-time applicant.

6.10 Denial of Certification

- 6.10.1 The Department may deny certification if it determines that the applicant has not demonstrated the ability to comply fully with applicable requirements or standards of performance. The Department also may deny any request for certification for the following causes:
 - 6.10.1.1 Fraudulent or deceptive information in the application for certification, or in any report or other submission, written or verbal, to the Department;
 - 6.10.1.2 Failure at any time to meet the qualifications for certification or failure to comply with any provision or requirement of any regulation, policy, or guidance adopted by the Department, or any directive issued by the Department to the certified consultant;
 - 6.10.1.3 Denial of certification or decertification by any other state or the federal government;

- 6.10.1.4 Failure to provide all information required in the application for certification to the satisfaction of the Department;
- 6.10.1.5 Repeated deficiencies in performing remedial activities under the Act; or
- 6.10.1.6 Failure to comply with any federal, state, or local law or regulation directly related to the purposes of the Act.
- 6.11 Suspension or Revocation of Certification or Denial of Recertification
 - 6.11.1 The Department may suspend or revoke any certification or deny recertification in accordance with the Act and these Regulations.
 - 6.11.2 A certified consultant whose certification has been suspended or revoked, or whose recertification has been denied shall not bid on, enter into a contract to perform, or engage in any work involving remedial activities within the State of Delaware during the period of suspension or revocation.
 - 6.11.3 Any employee of a certified consultant whose actions have caused or contributed to the suspension or revocation of the consultant's certification shall not perform remedial activities for any other certified consultant for a period equivalent to the suspension or revocation. No certified consultant shall knowingly employ such a person to perform remedial activities during the period of suspension or revocation of his or her former employer.
 - 6.11.4 In addition to the above, causes for suspension or revocation of certification, or denial of recertification may include the following actions by the consultant or any employee or any entity controlled by the consultant:
 - 6.11.4.1 Providing fraudulent or deceptive information in any report or other submission, written or verbal, to the Department;
 - 6.11.4.2 Failure at any time to meet the qualifications for certification;
 - 6.11.4.3 Failure to comply with any federal, state, or local law or regulation, policy, or guidance directly related to the purpose of the Act;
 - 6.11.4.4 Failure to comply with any applicable Department, Occupational Safety & Health Administration (OSHA) or Environmental Protection Agency (EPA) regulations or procedures at a site regulated under the Act;
 - 6.11.4.5 Failure to follow project specifications or any directive issued by the Department to the certified consultant, or to comply with the standards of performance pursuant to Section 6.8;
 - 6.11.4.6 Failure to comply with the terms of a Secretary's Order issued by the Department;
 - 6.11.4.7 Committing any act of fraud or conviction for an act of fraud;
 - 6.11.4.8 Suspension or revocation of certification or denial of recertification in any state or municipality related to the performance of any environmental work of personnel identified in the certification or recertification application;
 - 6.11.4.9 Repeated deficiencies in performing remedial activities under the Act; or

- 6.11.4.10 Any other circumstances that the Department determines justify suspension or revocation of certification, or denial of recertification.
- 6.11.5 If the Department suspends or revokes any certification, or denies certification or recertification, under the provisions of this Section, the Department shall promptly notify the certificate holder in writing, by certified mail, of the reason for suspension or revocation.
- 6.11.6 A person whose certification is suspended or revoked under this Section shall surrender the Certificate to the Department within the time period specified in the notice.
- 6.11.7 A person whose certification is revoked may not reapply for certification for two (2) years from the date of revocation.

6.12 Public Hearings

6.12.1 Request for Hearing

- 6.12.1.1 Any consultant who is denied certification, recertification, or whose certification is suspended or revoked may request a public hearing before a hearing officer appointed by the Secretary.
- 6.12.1.2 This request shall be made in writing to the Department within twenty (20) days of receipt of the notification of denial, suspension or revocation.
- 6.12.1.3 The Department shall provide a party requesting a public hearing written notice of the scheduled hearing at least twenty (20) days prior to the hearing.

6.12.2 Public Hearing Procedures

- 6.12.2.1 The hearing shall be conducted by the Secretary.
- 6.12.2.2 In connection with such hearings, the Secretary shall be empowered to:
 - 6.12.2.2.1 Issue orders for witnesses and other sources of evidence, either at the request of the affected person or on behalf of the Department;
 - 6.12.2.2.2 Administer oaths to witnesses:
 - 6.12.2.2.3 Exclude plainly irrelevant, immaterial, insubstantial, cumulative or privileged evidence;
 - 6.12.2.2.4 Limit unduly repetitive proof, rebuttal and cross-examination; or
 - 6.12.2.2.5 Hold pre-hearing conferences for the settlement or simplification of issues, for the disposal of procedural issues or disputes or to regulate and expedite the course of the hearing.
- 6.12.2.3 At all such hearings, the burden of proof shall always be upon the person challenging the initial decision of the Department to deny certification or recertification or to suspend or revoke certification. In addition, as to each hearing, all notices, relevant correspondence between the Department and the person challenging the Department's decision, documents admitted into evidence, and all other documentation relied upon by the Secretary,

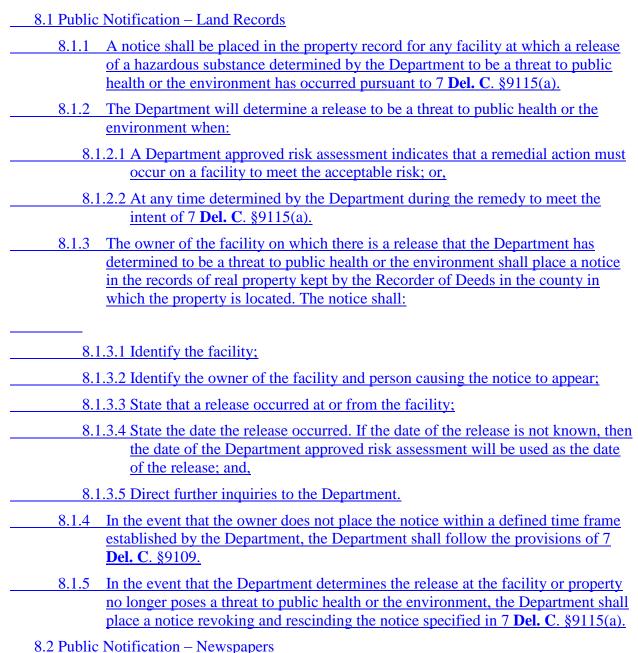
- shall be included in the Department's record of the case and retained by it for a period of 10 years.
- 6.12.2.4 A record of all testimony from which a verbatim transcript can be prepared shall be made of each hearing. Transcripts shall be made at the request and expense of any party to the hearing.
- 6.12.2.5 The Secretary shall make his decision based upon the entire record of the case.
- 6.12.2.6 Every decision of the Department shall be incorporated in a final order which may include, where appropriate, the following:
 - 6.12.2.6.1 A brief summary of the evidence;
 - 6.12.2.6.2 Findings of fact based upon the evidence;
 - 6.12.2.6.3 Conclusions of law;
 - 6.12.2.6.4 A concise statement of the Department's determination or action on the case; and
 - 6.12.2.6.5 The signature of the Secretary.
- 6.12.2.7 Every final order shall be mailed, or otherwise delivered, to each party and any other person requesting it no later than ten (10) days after the date it is issued.
- 6.12.3 Appeals to the Environmental Appeals Board
 - 6.12.3.1 A person aggrieved by a decision to deny certification or recertification, or to suspend or revoke the person's certification, may appeal the decision to the Environmental Appeals Board within twenty (20) days of receipt of the decision.
 - 6.12.3.2 No appeal shall operate to stay the implementation of the decision regarding denial of certification or recertification, or suspension or revocation of certification; however, for good cause shown, the Secretary may stay the action pending disposition of the appeal before the Environmental Appeals Board.
 - 6.12.3.3 The appeals to the Environmental Appeals Board of all decisions to deny certification or recertification, or to suspend or revoke a person's certification, shall be conducted in conformity with the provisions of 7 **Del.C.** §6008.

7.0 Analytical Procedures

- 7.1 Analytical procedures must be conducted in accordance with all applicable provisions of the Standard Operating Procedures of the Hazardous Substance Cleanup Act for Chemical Analytical Programs (SOPCAP), as amended by the Department. Other analytical methods, including screening, not addressed under the SOPCAP, which may be necessary to perform the remedy, must be approved by the Department.
- 7.2 Analytical Methods

- 7.2.1 All analytical procedures shall be performed in accordance with the analytical methods identified in the Sampling and Analysis Plan prepared under Section 9.3 of these Regulations.
- 7.2.2 Samples shall be analyzed consistent with methods appropriate for the facility, the media being analyzed, the suspected hazardous substances, and the anticipated use of the data.
- 7.2.3 Upon the Department's approval, the standard analytical methods identified in the Sampling and Analysis Plan may be modified to improve accuracy or achieve greater precision of analytical results.

8.0 Public Notification related to Remedial Activities under the Act



8.2.1 Whenever public notice is required by the Act or these Regulations, the Department shall, at a minimum, provide or require notice as described in this Section. Public notice shall be published in a newspaper circulated in the county of the proposed action by display advertisement, legal notice, or any other appropriate format, as determined by the Department. 8.2.2 Public notice, as required by the Act, shall be provided within twenty (20) days of the following: 8.2.2.1 Commencement of negotiations for a Brownfields Development Agreement (BDA). The date of Brownfields certification by the Department shall be deemed to be the commencement of negotiations for a BDA. 8.2.2.2 Commencement of negotiations for a Voluntary Cleanup Program (VCP) Agreement. The date of receipt of a VCP Application by the Department shall be deemed to be the commencement of negotiations for a VCP Agreement. 8.2.2.3 Determination by the Department that there has been a release or imminent threat of a release of a hazardous substance which will require a remedy. 8.2.3 Public notice, as required by the Act, shall be provided to establish a twenty (20) day comment period for the following: 8.2.3.1 Issuance of a Proposed Plan of Remedial Action; 8.2.3.2 Execution of a Consent Decree; and 8.2.3.3 Execution of a BDA. Public notice shall be provided upon the adoption of the Final Plan of Remedial Action (FPRA), including a brief description of the selected remedy and where a copy of the FPRA may be obtained. Public notice shall be provided twenty (20) days prior to public hearings.

9.0 Investigation

9.1 Initial Investigation

- 9.1.1 The purpose of the initial investigation is to determine if sufficient information is available for the Department to determine if a release or imminent threat of release of a hazardous substance has occurred, and, if so, to perform an initial hazard ranking of the facility based on the Delaware Hazard Ranking Model as described and specified in Section 3.3 of these Regulations.
- 9.1.2 Information shall be analyzed using quality assurance/quality control procedures to determine if the quality of the information is acceptable to the Department for the objective of the initial investigation.
- 9.1.3 The Department may determine that a Phase I Environmental Site Assessment, all appropriate inquiry (AAI), or a Preliminary Assessment satisfies the requirements of an initial investigation.
- 9.1.4 Based on the information obtained about the facility during the initial investigation or initial hazard ranking of the facility, the Department may:
 - 9.1.4.1 Require a facility evaluation or a remedial investigation;

- 9.1.4.2 Require an interim action;
- 9.1.4.3 Place the facility on the priority list prepared by the Department;
- 9.1.4.4 Take any other action, or no action, as determined by the Department to be appropriate; or
- 9.1.4.5 Issue a Conditional No Further Action Determination.
- 9.1.5 A Conditional No Further Action Determination pursuant to paragraph 9.1.4.5 of this subsection does not preclude the Department from requiring further action based on additional information or other circumstances as it deems appropriate.

9.2 Facility Evaluation

- 9.2.1 The purpose of the facility evaluation (FE) includes:
 - 9.2.1.1 Developing information and sampling data which will meet the data quality objectives;
 - 9.2.1.2 Confirming the release or imminent threat of release;
 - 9.2.1.3 Identifying the hazardous substances with sufficient data to determine future action at the facility. The FE does not require that the full extent of contamination be identified or that a full risk assessment be performed;
 - 9.2.1.4 Identifying facility characteristics that could result in hazardous substances entering and moving through the environment; and
 - 9.2.1.5 Performing an initial screening as described in Section 9.3 in order to evaluate the threat to public health, welfare, and the environment.
- 9.2.2 The Department may determine that a Phase II Environmental Site Assessment, a site inspection, site specific assessment satisfies the requirements of a FE; or
- 9.2.3 The Department may determine that existing information constitutes the equivalent of all or part of a FE.
- 9.2.4 The scope of the FE will depend on the specific characteristics of the facility. Sufficient information shall be collected to perform an initial screening as defined in Section 9.3.
- 9.2.5 A FE shall be conducted in accordance with the criteria, procedures, and time schedules established and agreed to by the Department.
- 9.2.6 Based on the information obtained about the facility during the FE and the initial screening, the Department will:
 - 9.2.6.1 Revise the relative priority of the facility by performing a hazard ranking based on the FE results;
 - 9.2.6.2 Conduct or require the performance of a remedial investigation and/or a feasibility study;
 - 9.2.6.3 Enter into a Settlement Agreement with any person that offers to conduct a remedial investigation and/or feasibility study;

- 9.2.6.4 Conduct or require an immediate remedial action or interim action;
- 9.2.6.5 Conduct or require any other action, or no action, as determined by the Department; or
- 9.2.6.6 Issue a Conditional No Further Action Determination.

9.3 Initial Screening

- 9.3.1 The methodology described in this Section shall apply to a facility evaluation (FE) or equivalent investigation as specified in Section 9.2 of these Regulations.
- 9.3.2 The purpose of the initial screening shall be to determine whether, based on available data, a release at a facility poses a potential risk to human health, welfare, or the environment above the acceptable site specific risk.
- 9.3.3 The initial screening shall identify the maximum observed concentrations of analytes found in environmental samples. The sample locations shall be in areas of the facility where the highest levels of contamination are likely to exist.
 - 9.3.3.1 Any laboratory confirmed analyte concentration, in excess of the screening levels approved by the Department, may require further evaluation.
 - 9.3.3.2 The scope of the initial screening shall include an ecological screening to determine whether an Ecologically Sensitive Area (ECSA) is present on site or immediately adjacent to the site. If an ECSA is present, further ecological evaluation shall be performed.

9.4 Remedial Investigation

- 9.4.1 The purpose of the remedial investigation (RI) includes:
 - 9.4.1.1 Characterizing the nature and extent of the release or the potential release of hazardous substances;
 - 9.4.1.2 Collecting data to perform a risk assessment as specified in Section 10.0; and
 - 9.4.1.3 Identifying the specific conditions that require potential remediation.
- 9.4.2 A Department approved Sampling and Analysis Plan (SAP), as specified in Section 9.6, is required prior to conducting a RI.
- 9.4.3 The Department may determine that the existing information regarding a facility satisfies all or part of the requirements of a RI.
- 9.4.4 The scope of the RI will depend on the specific characteristics of the facility and will meet the data quality objectives specified in the SAP.
- 9.4.5 A RI shall be conducted in accordance with the criteria, procedures, and time schedules determined by the Department.
- 9.4.6 The results of the RI will be evaluated to determine if data quality objectives, as described in the SAP, have been met.
- 9.4.7 Based on the information obtained about the facility during the RI and risk assessment, the Department may:

- 9.4.7.1 Require a Feasibility Study, as specified in Section 12.4, to evaluate potential remedies for the facility;
- 9.4.7.2 Require or conduct additional investigation or remedy (interim action); and/or
- 9.4.7.3 Issue a Proposed Plan of Remedial Action.

9.5 Brownfield Investigation

- 9.5.1 The Brownfield investigation, which is applicable to certified Brownfield sites, shall meet the requirements of the RI as specified in Section 9.4.
- 9.6 Sampling and Analysis Plan The following requirements are applicable to all stages of investigation:
 - 9.6.1 Analytical procedures, including field screening methods, must be conducted in accordance with all applicable provisions of the Standard Operating Procedures of the Hazardous Substance Cleanup Act for Chemical Analytical Programs (SOPCAP), as issued or amended by the Department, or other methods or procedures preapproved by the Department.
 - 9.6.2 Data shall be evaluated against accepted quality assurance/quality control parameters to determine data usability.
 - 9.6.3 Sampling of the environmental media should be performed to collect representative samples that reflect the data quality objectives of the investigation.

10.0 Risk Assessment

- 10.1 The methodology described in this section shall apply to the results of a remedial investigation as described and specified in Section 9.4 of these Regulations.
- 10.2 The purpose of the risk assessment is to characterize the nature and magnitude of health risks to humans and adverse effects to ecological receptors caused by the release of hazardous substances at a facility.
- 10.3 The methods of risk assessment shall conform to formally issued guidance and policy of the Department or to other methods preapproved by the Department.
- 10.4 The risk assessment shall use exposure assumptions that result in an overall exposure assessment that is conservative and consistent with the current and potential future use of the facility.
- 10.5 Toxicological data and exposure assumptions used in risk calculations shall appear in the risk assessment report. The toxicological data shall be from the Integrated Risk Information System or other sources approved by the Department.

11.0 Remedial Action Objectives & Cleanup Levels

11.1 Remedial Action Objectives

11.1.1 During or following the remedial investigation, remedial action objectives shall be developed by a potentially responsible party, any person conducting the investigation, or the Department. Remedial action objectives will include qualitative and quantitative objectives. At the Department's discretion, remedial action objectives may be revised based on additional information.

- 11.1.2 Qualitative objectives describe, in general terms, how the remedial action will address specific threats to public health or welfare or the environment.
- 11.1.3 Based on the qualitative objectives, quantitative objectives will be developed that define specific remedial actions.
- 11.1.4 Remedial action objectives shall consider factors including current and potential land use, natural resource use, use of surrounding properties, background levels, facility specific risk assessment, specific environmental issues, and any applicable local, state and federal laws and regulations.

11.2 Cleanup Levels

- 11.2.1 Cleanup levels shall meet the acceptable risk.
- 11.2.2 Cleanup levels shall be based on site specific risks caused by releases of hazardous substances.
- 11.2.3 The future use of the facility shall be incorporated in a determination of cleanup levels based on site specific risks.
- 11.2.4 When multiple contaminants of concern (COCs) are present or multiple environmental media are contaminated, then the total cumulative risk from all of the COCs in all appropriate pathways of exposure shall not exceed the acceptable risk, except that:
 - 11.2.4.1 The cumulative non-carcinogenic effect of COCs shall be evaluated in relation to target organs.
 - 11.2.4.2 At its discretion, the Department may allow the maximum contaminant levels (MCLs) to be used as the cleanup levels for groundwater at a facility.
 - 11.2.4.3 When the background level of a contaminant exceeds the concentration corresponding to the acceptable risk, the background level shall be the cleanup level.

12.0 Remedial Actions

- 12.1 At any facility where the Department determines that a release has occurred, or a release is imminent, the Department may require a person to undertake appropriate remedial actions to reduce the risk of a release or imminent threat of release of hazardous substances to the acceptable risk level.
- 12.2 Department Oversight of Remedial Actions
 - 12.2.1 A person shall not perform a remedial action without the Department's concurrent oversight, unless the activity is being performed pursuant to another state or federal environmental regulatory authority.
 - 12.2.2 A person must enter into a settlement agreement with the Department in order to obtain oversight from the Department for the remedial action.

12.3 Interim Actions

12.3.1 The Department may require or permit an interim action at a facility prior to issuing the Proposed Plan of Remedial Action for the facility where the

- Department determines that it is consistent with or will not interfere with potential or final remedial actions.
- 12.3.2 Interim actions include spill response, drainage controls, site stabilization, removal of drums, tanks or bulk storage containers, free product removal, and excavation of contaminated material.
- 12.3.3 For any facility at which an interim action has occurred, the Proposed Plan of Remedial Action shall include a description of the interim action and a determination of whether additional remedial action is needed to meet the remedial action objectives.
- 12.3.4 The Department may adopt an interim action as all or part of the chosen final remedial action for a facility if it determines the interim action is protective of public health or welfare or the environment.

12.4 Remedial Alternative Selection

- 12.4.1 Prior to the selection of a remedial action, the Department may require a feasibility study depending on site specific factors including the nature of the contamination and the complexity of the facility. The feasibility study shall address each contaminated medium identified in the remedial investigation or risk assessment.
- 12.4.2 The Department, or any person who has entered into an agreement with the Department concerning a facility, shall propose one or more remedial alternatives for the facility which meet the criteria in 12.4.4.
- 12.4.3 The Department will evaluate and select the proposed remedial alternatives for the facility according to the threshold and balancing criteria.
- 12.4.4 At a minimum, an approved remedial action shall meet the following initial threshold criteria:
 - 12.4.4.1 Protection of public health or welfare or the environment;
 - 12.4.4.2 Attainment of remedial action objectives, including applicable, relevant and appropriate local, state, and federal laws and regulations; and
 - 12.4.4.3 Control sources of contamination.
- 12.4.5 The Department shall consider the following balancing criteria in selecting a preferred remedial action from alternatives meeting the initial threshold criteria:
 - 12.4.5.1 Incorporation of sustainability principles including low energy inputs, restoration of habitat, preservation of cultural resources, land reuse, materials recycling, infrastructure reuse, reduced run-off, permanence and protectiveness without an environmental covenant;
 - 12.4.5.2 Reduction of contaminant toxicity, mobility or volume;
 - 12.4.5.3 Comments or input from the community in which the facility is located;
 - 12.4.5.4 Ease of implementation;

- 12.4.5.5 Short-term effectiveness;
- 12.4.5.6 Long-term effectiveness;
- 12.4.5.7 Life-cycle costs including present and future direct and indirect capital costs, operation and maintenance costs, compliance monitoring costs, and other foreseeable costs.
- 12.4.6 For remedial action alternatives that satisfy the criteria of 12.4.4 and after the Department considers the balancing criteria of 12.4.5, preference shall be given to the remedial action which is most cost effective.
- 12.4.7 A remedial action may not be considered cost effective if the incremental cost of the remedial action is substantial and disproportionate to the incremental degree of protection it would achieve.
- 12.4.8 Upon selection of the remedial alternative, the Department shall issue a Proposed Plan of Remedial Action.

12.5 Proposed Plan of Remedial Action

- 12.5.1 The Department shall issue a Proposed Plan of Remedial Action describing the proposed remedial action prior to implementation of the remedial action for a facility. When the Department requires or approves an interim action as described in Section 12.3 of these Regulations, the Department may issue a Proposed Plan of Remedial Action after the implementation of the interim action.
- 12.5.2 The Department shall provide public notice of the Proposed Plan of Remedial Action and the details of the public comment period as described in Section 8.0 of these Regulations.
- 12.5.3 At the conclusion of the public comment period, the Department shall evaluate questions and comments on the Proposed Plan of Remedial Action.

12.6 Final Plan of Remedial Action

- 12.6.1 The Department shall issue a Final Plan of Remedial Action with due consideration of the comments on the Proposed Plan of Remedial Action and any additional study or investigation the Department deems useful.
- 12.6.2 The Proposed and Final Plans of Remedial Action and the basis for them, as well as all comments received by the Department, shall constitute the remedial decision record of the Secretary.
- 12.6.3 The Department shall provide public notice of the Final Plan of Remedial Action as described in Section 8.0 of these Regulations.

12.7 Remedial Action

- 12.7.1 No person shall implement a remedial action at a facility without concurrent oversight from the Department.
- 12.7.2 All of the phases of the remedial action require prior written approval from the Department.
- 12.7.3 Remedial Action Work Plan

- 12.7.3.1 A Remedial Action Work Plan (RAWP) shall be prepared for any remedial action. The level of detail of the RAWP will depend on the nature and complexity of the Remedial Action, and will require the Department's written approval prior to implementation. The Department may require the submission of the following documents as part of the RAWP, which may be combined into one document:
 - 12.7.3.1.1 Information as required by the Department including treatability studies, and pilot studies; and
 - 12.7.3.1.2 Construction plans and specifications which shall describe in detail the remedial action to be performed. The plans and specifications shall be prepared in conformity with the currently accepted engineering practices and techniques. Any applicable or required permits shall be documented in the construction plans and specifications.
- 12.7.3.2 Any revisions to plans and specifications shall require the Department's prior written approval.
- 12.7.3.3 The Department will require and review a Health and Safety Plan (HASP). The HASP will include criteria to adequately monitor the protection of public health or welfare or the environment.

12.7.4 Remedial Action Implementation

- 12.7.4.1 Implementation of the remedial action shall be conducted in accordance with the approved Remedial Action Work Plan.
- 12.7.4.2 Upon request by the Department, interim progress reports for the remedial action must be submitted.
- 12.7.4.3 The Remedial Action Completion Report (RACR) shall contain as-built drawings and documentation of all aspects of the implementation of the remedial action approved by the Department. The RACR shall be certified by a Delaware licensed professional engineer and/or geologist, as appropriate, based on testing results and inspections as to whether the remedial action work has been implemented in compliance with the Proposed and Final Plans of Remedial Action, the plans and specifications, and other related documents. The RACR is subject to the approval of the Department.
- 12.7.4.4 The Department may conduct inspections of the facility at any time to ensure compliance with the Final Plan of Remedial Action and long-term stewardship requirements.

12.7.5 Long-Term Stewardship

- 12.7.5.1 Long-term stewardship (LTS) is addressed in a LTS Plan approved by the Department, and includes operation and maintenance, monitoring, environmental covenant, and periodic review requirements.
- 12.7.5.2 Operation and Maintenance

- 12.7.5.2.1 Operation and maintenance refers to measures initiated after the remedial action is determined to be operational and functional.Operation and maintenance includes all activities necessary to ensure the integrity and functionality of the remedial action.
- 12.7.5.2.2 Any person responsible for operation and maintenance must obtain any necessary permits before initiating activities which require a permit under State or Federal or local laws and regulations. Possession of such permits shall be required for initial, and continuing, Department approval of the operation and maintenance plan.
- 12.7.5.2.3 Failure to perform operation and maintenance in compliance with a Department approved operation and maintenance plan may result in an enforcement action up to and including rescission of the Certification of Completion of Remedy.

12.7.5.3 Remedial Action Monitoring

- 12.7.5.3.1 Remedial action monitoring is required to measure the long-term effectiveness of the remedial action.
- 12.7.5.3.2 Remedial action monitoring ensures the attainment of the cleanup level and confirms the long_term effectiveness of the remedial action objectives.
- 12.7.5.3.3 Remedial action monitoring requirements are contained in the LTS Plan which is subject to the approval of the Department.

12.7.5.4 Environmental Covenant

- 12.7.5.4.1 The Department may require the placement of an Environmental Covenant (EC) on a facility, as provided for in 7 **Del.C.** §§7907-7920, the Uniform Environmental Covenants Act (UECA), as all or part of the remedial action.
- 12.7.5.4.2 An EC may be used in order to reduce the potential for exposure to hazardous substances, and may include land use restrictions, activity restrictions, groundwater use restrictions, operations and maintenance requirements, or other institutional controls.

12.7.5.5 Periodic Review

- 12.7.5.5.1 The Department may require periodic review consisting of an evaluation of the continuing long-term effectiveness and protectiveness of the remedial action.
- 12.7.5.5.2 If the Department selects or approves a remedial action that results in hazardous substances remaining at a facility at concentrations which exceed applicable cleanup levels, the Department shall periodically review the remedial action as it deems necessary to ensure that public health or welfare or the environment is protected.

12.8 Interference with Remedy

12.8.1 This section will apply to the following:

- 12.8.1.1 A facility for which any person has received notice pursuant to 7 **Del.C.** §9107;
- 12.8.1.2 A facility which is the subject of an application for entry into the Voluntary Cleanup Program or the Brownfields Development Program;
- 12.8.1.3 A facility undergoing an interim action;
- 12.8.1.4 A facility undergoing a remedial investigation or remedial action;
- 12.8.1.5 A facility for which an order has been issued pursuant to 7 **Del.C.** §9106(b) or 7 **Del.C.** §9109(b); or
- 12.8.1.6 A facility that has restrictions required by the Final Plan of Remedial Action.
- 12.8.2 No person shall perform any work or construction activities that may interfere with the remedial action at the facility, unless authorized by the Department as part of the remedial action, without doing all of the following:
 - 12.8.2.1 Providing notice to the Department of any such planned work or construction activities;
 - 12.8.2.2 Providing copies of all plans and a description of the planned work or construction activities to be performed at the facility;
 - 12.8.2.3 Providing an explanation of how and why the planned work or construction activities will not interfere with any part of the remedy; and
 - 12.8.2.4 Obtaining the Department's prior written approval for any work or construction activities to be performed at the facility.
- 12.8.3 For the purpose of Section 12.8, "work or construction activities" shall include:
 - 12.8.3.1 Any building, constructing, drilling, digging, excavating, grading, filling, landscaping, earthmoving, agricultural or any other land disturbing activities;
 - 12.8.3.2 Storage, bulk or not, of inventory, equipment, or materials which limit access to remedial activities; or
 - 12.8.3.3 Any activities that may cause additional or new releases or exacerbation of site conditions.
- 12.8.4 This subsection shall not apply to any work or construction activities performed in a facility or areas of a facility where any drilling, digging or excavation is carried out to collect samples in accordance with any appropriate plan approved by the Department.

13.0 Remedy Completion and Site Closure

- 13.1 Remedy Completion
 - 13.1.1 In order to obtain a Certification of Completion of Remedy (COCR) pursuant to 7 **Del.C.** §9108, a person seeking a COCR shall submit to the Department a signed request for the COCR. The request for certification must be accompanied by the following documentation supporting the request:

- 13.1.1.1 Proof that any Environmental Covenant, if required by the Final Plan of Remedial Action, has been filed with the Recorder of Deeds in the county in which the facility is located;
- 13.1.1.2 Proof of payment of all Department costs as defined in a settlement agreement;
- 13.1.1.3 The Department's written approval of a long-term stewardship plan, if required by the Final Plan of Remedial Action; and
- 13.1.1.4 The Remedial Action Completion Report, if required, indicating that all requirements specified within the Final Plan of Remedial Action have been fulfilled.
- 13.1.2 A COCR may be amended when a change in site conditions warrants a change in any restrictions imposed by the COCR.
- 13.1.3 A person will be ineligible to receive a COCR from the Department until a remedial action in accordance with the Act is approved by the Department and has been completed at the facility.

13.2 Facility Closure

- 13.2.1 All facilities addressed under 7 **Del.C.** Ch. 91 will be eligible for facility closure. A facility is eligible for closure when the Department determines that all requirements of the Final Plan of Remedial Action have been completed and no restrictions remain on the facility. The Department may require additional remedial activities at the facility after it has achieved closure if circumstances change or if any new information becomes available which shows that the completed remedial action is no longer protective of public health or welfare or the environment.
- 13.2.2 Facility closure is achieved through the issuance of a facility closure determination by the Department under the following conditions:
 - 13.2.2.1 The Final Plan of Remedial Action requires no remedial activities at the facility; or
 - 13.2.2.2 A Certification of Completion of Remedy is issued or amended by the Department and the Department determines that the remedial action, as described in the Final Plan of Remedial Action, is completed and no restrictions remain on the facility; or-
 - 13.2.2.3 Based on the information obtained about a facility during an initial investigation or facility evaluation, the Department determined that no action is necessary.

13.3 Archiving Facilities

13.3.1 At its discretion, the Department will remove sites from the current inventory of hazardous substance release facilities to the archive of closed facilities.

14.0 Natural Resource Damage Assessment and Restoration

14.1 Purpose and Applicability

- 14.1.1 To ensure comprehensive assessment of injuries or losses to natural resources and natural resource services resulting from a release of hazardous substances or results from required actions to prevent, mitigate, or remedy such a release.
- 14.1.2 To ensure restoration, replacement, or compensation for all lost or injured natural resources and natural resource services resulting from the release of a hazardous substance, or required actions to prevent, mitigate, or remedy such a release, that would not otherwise be restored or replaced as part of any remedial action.
- 14.1.3 A brownfield developer that does not cause or contribute to a release related to the site is not liable for natural resource damage assessment and restoration costs related to the release at the site, and such brownfield developer shall not be subject to or limited by any other provision of these Regulations relating solely to natural resource damages.

14.2 Restoration, Replacement, and Compensation

- 14.2.1 The Department may require restoration, replacement and/or compensation for lost or injured natural resources and natural resource services. Restoration, replacement and compensation may include costs of monitoring, maintenance, and/or corrective activities necessary to sustain the restoration project in perpetuity.
 - 14.2.1.1 The Department may require the restoration of an injured resource as nearly as practicable to its baseline condition. The baseline condition shall be determined in terms of the injured resource's physical, chemical, and biological properties or the services it provided prior to the release.
 - 14.2.1.2 The Department may require replacement or acquisition of the equivalent of any injured natural resource or natural resource service.
 - 14.2.1.3 The Department may require compensation for an injury to natural resources and natural resource services, including compensation for lost uses or services during the entire period prior to reattainment of the baseline condition. If any restoration or replacement efforts ultimately fail, the Department may require compensation for any periods after such failure, until baseline conditions are restored.
- 14.2.2 The Department may recover all the Department's costs of performing the natural resource damage preassessment, assessment, and post-assessment.

14.3 Agreements with other Persons

14.3.1 The Department may enter into agreements with persons for the assessment, restoration, replacement, and/or compensation for damages to natural resources and natural resource services. These agreements include:

14.3.1.1 Cooperative Assessments

14.3.1.1.1 Cooperative assessments are performed by the Department and other persons to jointly assess damages to natural resources and/or natural resource services.

- 14.3.1.1.2 Agreements for cooperative assessments with a person may include a provision obligating the person to pay the Department's costs of assessment on a periodic basis while the assessment is in progress.
- 14.3.1.2 Restoration in Anticipation of Unquantified Claims
 - 14.3.1.2.1 The Department may elect to enter into an agreement with a person to allow the person to conduct restoration at a site, with oversight by the Department, before a damage assessment is completed. Upon completion of the restoration work, as approved by the Department, the Department may grant credit to the person to offset all or a portion of the person's liability for the natural resource damage at the site.
 - 14.3.1.2.2 The Department may permit a credit granted to a person for restoration at a site or sites to be used to offset the person's liability at other sites in Delaware or at sites outside the State which have injured Delaware's trust resources.

14.4 Pre-Assessment Phase

- 14.4.1 Upon identification of a release or threat of a release of a hazardous substance, the Department may conduct a preliminary review to determine whether there are any natural resources affected or potentially affected by the release or threat of release. Upon finding that a release of a hazardous substance may injure, or may have injured, trust resources of the State, the Department may conduct, either alone or in cooperation with trustee agencies of the Federal government, tribes, or other states:
 - 14.4.1.1 A pre-assessment screen to determine whether the release justifies a natural resource damage assessment;
 - 14.4.1.2 Sampling and data collection for the purpose of obtaining evidence which would otherwise be lost; or
 - 14.4.1.3 Emergency response activities to the extent the Department deems appropriate to prevent or reduce actual or potential injuries to natural resources.

14.4.2 Pre-Assessment Screen

- 14.4.2.1 The pre-assessment screen includes a review of existing information, preliminary identification of natural resources potentially at risk, sampling, preliminary identification of the substances released, preliminary identification of pathways of exposure, and costs of performing an assessment.
- 14.4.2.2 Based on information gathered pursuant to the pre-assessment screen, the Department may make a preliminary determination that the following criteria are substantially met before proceeding with an assessment:
 - 14.4.2.2.1 A release of a hazardous substance has occurred or may occur:

- 14.4.2.2.2 Natural resources for which the State may assert trusteeship have been or are likely to have been adversely affected by the release or potential release;
- 14.4.2.2.3 The quantity and concentration of the released or potentially released hazardous substances is potentially sufficient to cause injury to those natural resources;
- 14.4.2.2.4 Data sufficient to pursue an assessment are readily available or likely to be obtained at reasonable cost; or
- 14.4.2.2.5 Remedial actions, if any, carried out or planned, do not or will not sufficiently remedy the injury to natural resources without further action.

14.5 Assessment Phase

- 14.5.1 If a damage assessment is determined to be appropriate in the pre-assessment phase, the Department, alone or in conjunction with other Trustees or PRPs, may develop a damage assessment plan. Assessments may be conducted using the procedures outlined in 43 CFR Part 11, as amended, or by other procedures determined to be appropriate by the Department. The damage assessment plan may be incorporated into the remedial investigation work plan.
- 14.5.2 The assessment is conducted in the following three stages: injury determination, quantification, and damage determination.
 - 14.5.2.1 Injury Determination: This determines whether an injury to one or more natural resources or natural resource services may have occurred, and whether the injury may have resulted from the release of a hazardous substance.
 - 14.5.2.2 Quantification: If it is determined that there may be an injury to a natural resource or natural resource service, the magnitude of the injury may be evaluated.
 - 14.5.2.3 Damage Determination: This determines the damages resulting from the release of a hazardous substance based upon the information provided in the injury determination and quantification stages. Restoration Valuation, and one or both of the additional valuation approaches outlined below, may be used in the Damage Determination.
 - 14.5.2.3.1 Restoration Valuation: This methodology consists of damage estimation based on restoration or replacement of the injured natural resource due to the release of a hazardous substance. An evaluation of restoration alternatives may be conducted. The evaluation considers a range of actions to restore the injured services over various recovery periods, and may include a "no action" or natural recovery alternative. The expected net present value of each restoration alternative shall be determined; and
 - 14.5.2.3.2 Use Value Valuation: These methodologies consist of damage estimations based on the reduction of use values, including hiking,

- fishing, hunting, boating, or camping. The use values of the injured resource may be estimated by using approaches specified by the Department; and/or
- 14.5.2.3.3 Nonuse Value Valuation: These methodologies consist of damage estimations based on the reduction of nonuse values, including aesthetics. The nonuse values of the injured resource may be estimated by using approaches specified by the Department.
- 14.5.3 The results of an assessment performed by other persons shall be submitted to the Department for its approval.

14.6 Post-Assessment Phase

- 14.6.1 Upon completion of the assessment, the Department may, as appropriate:
 - 14.6.1.1 Require persons to provide compensation for the injury to natural resources and natural resource services;
 - 14.6.1.2 Seek compensation from an appropriate trust fund;
 - 14.6.1.3 Select an appropriate restoration alternative pursuant to 14.6.2;
 - 14.6.1.4 Develop, or require a person to develop, a restoration plan. The plan describes the specific actions to be taken to restore, replace, and/or provide compensation for the injured natural resources and natural resource services;
 - 14.6.1.5 Implement, or require a person to implement, the approved restoration plan;
 - 14.6.1.6 Recover its costs for assessment, restoration planning, restoration, and post-restoration activities from a person or appropriate trust fund.
- 14.6.2 In the evaluation of restoration alternatives, the Department may:
 - 14.6.2.1 Consider whether the proposed restoration projects serve to restore, replace, or acquire the equivalent of the natural resources and natural resource services injured as a result of the subject releases; or
 - 14.6.2.2 Consider projects benefitting the watershed, aquifer, populations, or species injured, and projects benefitting other watersheds, aquifers, populations, or species. Preference may be given to projects that benefit the affected watershed, aquifer, populations, or species.